PROCESS FOR LARGE-SCALE ISOLATION AND PURIFICATION OF HYPOTHALAMIC INHIBITORY FACTOR

ABSTRACT OF THE DISCLOSURE

The present invention relates to a method of isolating and/or purifying hypothalamic inhibitory factor (HIF) from a sample (e.g., tissue fluid) containing HIF. The present invention provides for isolation of large amounts of HIF using diafiltration, solid phase extraction and immunoaffinity techniques. In one embodiment, the invention relates to a method of purifying hypothalamic inhibitory factor from a sample containing hypothalamic inhibitory factor comprising subjecting the sample to diafiltration, solid phase extraction and immunoaffintiy chromatography. In a particular embodiment, the invention relates to subjecting the sample to diafiltration to produce a diafiltrate of HIF; subjecting the diafiltrate to a first solid phase extraction (SPE) to produce a first fraction of HIF; subjecting the first fraction to immunoaffinity chromatography, wherein an antibody which binds to HIF is coupled to an immunoaffinity column, to produce a second fraction of HIF; subjecting the second fraction of HIF to reverse phase HPLC chromatography to produce a third fraction of HIF; and recovering purified HIF from the third fraction.